

## **ABSTRACT**

Hybrid probe particles comprising a nanoparticle of gold of diameter in the range extending from 2 to 30 nm on the surface of which, on the one hand, at least one, and preferably from one to 100, organic probe molecules are grafted by gold-sulphur bonds and on the other hand, at least 10, and preferably 10 to 10000, molecules with luminescent activity, as well as their preparation process.